

Case Study

Project

Castle Donington Western Relief Road, Leicestershire, UK

Client

Miller Homes Ltd and Clowes Development (UK) Ltd

Project Value

£5M

The Castle Donington Western Relief Road forms part of the Park Lane Development located on the western fringe of the town. The scheme involves the development of approximately 77ha of land comprising of 75 residential dwellings, 9,500m² of B1 employment and 30,600m² of B2/B8 employment.

The Western Relief Road is a pre-commencement condition that has to be provided in phases to suit the development. It comprises 2.5km single carriageway road with a 3m wide shared footway/cycleway provided on the east side of the highway. It runs from Back Lane to the north Castle Donington in a westerly direction to the Short Lane roundabout with a link to East Midlands Distribution Centre, before turning south with junctions at Park Lane and Top Hill on the airport perimeter road. The vertical alignment of the road between Short Lane and Park lane dictates that a crawler lane is required.

The design has been undertaken in accordance with the requirements of Leicester County Council Design Guide (6C's design guide) and the Design Manual for Road and Bridges. Sustainable Drainage principles have been used for the whole site. The surface water drainage disposal includes a mixture of infiltration and controlled discharge to the existing Trent Brook watercourse. The highway corridor includes swales and detention basins that cater for the western relief road and all residential and commercial development areas. The scheme also includes alteration of the signalization of the A50(T) J1 to provide signal heads to two currently uncontrolled local roads. The design of highway structures including retaining walls, drainage culverts and headwalls has been undertaken in accordance to BD2/12 of DMRB.

Services provided

Highway Design, Drainage Design, Structural Design, Geotechnical Interpretation Engineering, Coordination of Services Diversions, and Preparation of Contract Documentation.

